

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the pending application. The Office Action dated September 20, 2006 has been received and its contents carefully reviewed. Applicants gratefully acknowledge the Examiner's indication of allowable subject matter in claims 36-39.

Claims 1-8, 13-17, 21, 25, 29-30, 32 and 34-39 are pending in the present application. Reexamination and reconsideration of the pending claims are respectfully requested.

In the Office Action, the Examiner rejected claims 1, 4-6, 13-17, 21, 25-27, 29, 30 and 32-35 under 35 U.S.C. § 103(a) as being unpatentable over Tone (U.S. Pa tent No. 6,404,512) in view of Margulis et al. (U.S. Patent No. 6,157,396) and Tu et al. (U.S. Patent No. 5,877,717); and rejected claims 3, 7 and 8 under 35 U.S.C. § 103(a) as being unpatenable over Tone in view of Margulis et al. and Hiroki (U.S. Patent No. 6,771,238).

The rejection of claims 1, 4-6, 13-17, 21, 25-27, 29, 30 and 32-35 under 35 U.S.C. § 103(a) as being unpatentable over Tone in view of Margulis et al. and Tu et al. is respectfully traversed and reconsideration is requested.

Claim 1 is allowable over the cited references in that claim 1 recites a combination of elements including, for example, "a multi-channel gamma voltage generator having a plurality of digital to analog converters (DACs), the digital to analog converters generating n gamma voltages (wherein n is an integer) having a different voltage level in response to the digital gamma data respectively" None of the cited references, singly or in combination, teaches or suggests at least this feature of the claimed invention. Accordingly, Applicants respectfully submit that claim 1 and claims 5-6, which depend therefrom, are allowable over the cited references.

On page 4 of the Office Action, the Examiner cites Tu et al. as teaching the multi-channel gamma voltage generator having a plurality of digital to analog converters (DACs) recited in claim 1. In Fig. 1 of Tu et al., the DAC includes the ROM decoder 1 and the reference voltage generator 2 and decodes digital data D0 to D5 using the ROM decoder 1. Thus, although the DAC in Fig. 1 of Tu et al. may correspond to the DAC 96 in the column driver of the present

invention, it does not teach or suggest the multi-channel DAC 93 of the present application. Also, the DAC in Fig. 3 of Tu et al. includes the decoder 31 or 32 and register 35 or 36. Thus, although the DAC in Fig. 3 of Tu et al. may correspond to the DAC 96 having the data input part 99 and the decoder 98 of the present invention, it does not teach or suggest the multi-channel DAC 93 of the present application.

Claim 13 is allowable over the cited references in that claim 13 recites a combination of elements including, for example, "responding to the one set of the gamma data for the selected mode to generate n gamma voltages (wherein n is an integer) having a different voltage level using a plurality of digital to analog converters (DACs), the digital to analog converters responding to the digital gamma data respectively" None of the cited references, singly or in combination, teaches or suggests at least this feature of the claimed invention. Accordingly, Applicants respectfully submit that claim 13 and claims 14, 15 and 17, which depend therefrom, are allowable over the cited references.

Claim 21 is allowable over the cited references in that claim 21 recites a combination of elements including, for example, "a plurality of digital-to-converters (DACs) selecting the reference voltages in response to the digital gamma data to generate n gamma voltages (wherein n is an integer) having a different voltage level, respectively" None of the cited references, singly or in combination, teaches or suggests at least this feature of the claimed invention. Accordingly, Applicants respectfully submit that claim 21 and claim 25, which depends therefrom, are allowable over the cited references.

Claim 29 is allowable over the cited references in that claim 29 recites a combination of elements including, for example, "generating a plurality of gamma voltages from the plurality of gamma reference voltages using a plurality of digital-to-converters (DACs), the DACs selecting the reference voltages in response to the digital gamma data to generate the gamma voltages having a different voltage level, respectively" None of the cited references, singly or in combination, teaches or suggests at least this feature of the claimed invention. Accordingly, Applicants respectfully submit that claim 29 and claims 30 and 32, which depend therefrom, are allowable over the cited references.

Claim 34 is allowable over the cited references in that claim 34 recites a combination of elements including, for example, "a plurality of digital-to-converters (DACs) generating n gamma voltages (wherein n is an integer) having a different voltage level in response to the digital gamma data, respectively" None of the cited references, singly or in combination, teaches or suggests at least this feature of the claimed invention. Accordingly, Applicants respectfully submit that claim 34 and claim 35, which depends therefrom, are allowable over the cited references.

The rejection of claims 3, 7 and 8 under 35 U.S.C. § 103(a) as being unpatentable over Tone in view of Margulis et al. and Hiroki is respectfully traversed and reconsideration is requested. Applicants respectfully submit that because Hiroki fails to cure the deficient teachings of Tone and Margulis et al. as discussed with respect to claim 1, claims 3, 7 and 8 are allowable over the cited references.

Applicants believe the application is in condition for allowance and early, favorable action is respectfully solicited. If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. § 1.136, and any additional fees required under 37 C.F.R. § 1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911. A duplicate copy of this sheet is enclosed.

Dated: December 20, 2006

Respectfully submitted,

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Claim 34 is allowable over the cited references in that claim 34 recites a combination of elements including, for example, "a plurality of digital-to-converters (DACs) generating n gamma voltages (wherein n is an integer) having a different voltage level in response to the digital gamma data, respectively" None of the cited references, singly or in combination, teaches or suggests at least this feature of the claimed invention. Accordingly, Applicants respectfully submit that claim 34 and claim 35, which depends therefrom, are allowable over the cited references.

The rejection of claims 3, 7 and 8 under 35 U.S.C. § 103(a) as being unpatentable over Tone in view of Margulis et al. and Hiroki is respectfully traversed and reconsideration is requested. Applicants respectfully submit that because Hiroki fails to cure the deficient teachings of Tone and Margulis et al. as discussed with respect to claim 1, claims 3, 7 and 8 are allowable over the cited references.

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